

The Factorial Survey Experiment on "Distribution of Work in Partnerships" in the German Family Panel (pairfam)

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I. Introduction

In 2017/18 a factorial survey experiment was implemented for the first time in the German Family Panel (*pairfam*).¹ Such experiments allow for the measurement of respondents' attitudes, beliefs, or behavioral intentions based on an experimental design and are widely used in the social sciences. Respondents are asked to evaluate one or several scenarios (so-called *vignettes*) describing hypothetical situations or individuals. These vignettes are composed of various information (*dimensions*) with multiple levels that are experimentally varied. By crossing several dimensions varied independently from each other, this method allows for a more precise measurement of judgment principles and normative attitudes than single-item questions. For example, trade-offs and interactions between the different dimensions that impact respondents' evaluations can be estimated. For further information on the general use of factorial survey experiments, see Auspurg and Hinz (2015), Mutz (2011), and Wallander (2009).

In the factorial survey experiment implemented in the 10th wave of the pairfam study, respondents were asked to evaluate the division of housework and paid labor in hypothetical partnerships. This multifactorial survey experiment allows researchers to disentangle how each individual dimension (here: partners' financial resources, gender, and family status) influences respondents' evaluations. This specific vignette design was explicitly drafted to disentangle gender role theories from alternative theories aiming to explain gendered work distributions within couples.

II. Description of the Factorial Survey Experiment

In the CASI (computer-assisted self-interview) mode of the pairfam survey, all respondents were asked to evaluate three situations (*vignettes*) that describe the division of housework and paid labor in hypothetical heterosexual partnerships. The rating task was varied in a between-respondents split: Respondents should either rate the appropriateness of the *division of housework* or the appropriateness of the *division of housework* or the appropriateness of the *division of housework*, paid

¹ Analyses are based on data from the tenth wave of the German Family Panel (pairfam), Release 10.0 (Brüderl et al. 2019). A detailed description of the study can be found in Huinink et al. (2011).

employment, and child care if applicable) for each of the hypothetical couples. All couples were described by several attributes (dimensions) that were experimentally varied in their levels across the different vignettes presented to the respondents. For instance, some couples were described as being married while others were not; in some vignettes, the female partner was the main income producer, while in other vignettes both partners were described as having similar earnings, or the male partner was the main breadwinner. This variation was implemented to be able to study the impact of these varied dimensions on respondents' ratings of the vignettes: Would evaluations of male and female adequate (house-) work shares differ when he or she is the main earner? In an additional between-respondent split, the amount of information (number of dimensions) on the hypothetical couples presented to respondents was varied, using three different levels: low, medium, and high. This was done to be able to test the impact of stereotypes and statistical discrimination on respondents' vignette ratings. Tables 1 and 2 provide an overview on all splits and vignette dimensions.

Figure 1. Introductory Text to the Vignette Module

We are interested in which distribution of the total workload in a partnership is perceived to be appropriate. In the following, 3 example couples will be introduced.

For all couples, both partners are <u>approximately 35 years old</u> and have <u>comparable</u> <u>education levels</u>. Some couples may have children who are cared for by others (e.g., day care, school) while their parents are working.

Please indicate how appropriate you think the distribution of housework and paid employment (and child care if applicable) [answer format 2 (vig_ant==2): the distribution of housework] is among each couple.

There are no right or wrong answers. We are simply interested in your personal opinion.

I will now hand the computer to you, so that you can answer the next four questions independently.

Source: The German Family Panel (pairfam) (2019). For an example of the original German text, see Appendix A0.

The vignette module began with a short, standardized preamble or introduction (*intro* hereafter, see Figure 1) that informed respondents on the evaluation task and also some general, standardized information on the hypothetical couples (i.e., age, the partners' similar education level, and child care availability for couples described as having children). This information remained constant for all respondents. In line with

different between-respondents splits, respondents were then informed of their response task with slightly different versions: They should either rate the *distribution of housework* or the *distribution of the total workload (i.e. housework, paid employment, and child care if applicable).* The intro text and instructions were read aloud by the respective interviewer, after which the interviewers handed the computer to the respondents to answer the next questions in a self-administered mode (CASI). This was done to reduce a possible social desirability bias, and also due to the length of the vignette texts, which can be better assessed when read by respondents themselves (for general information on factorial survey methods, see Auspurg and Hinz 2015).

Respondents were asked to rate the appropriateness of the share of work (housework or total workload) on an eleven-point scale ranging from -5 "*Her / His share of the housework / total workload should be much smaller*" over 0 "*Her / His share of the housework / total workload is appropriate*" to +5 "*Her / His share of the housework / total workload is appropriate*" to +5 "*Her / His share of the housework / total workload is appropriate*". All respondents were presented with three vignettes, of which the share to be evaluated (female vs. male partner) was randomly varied to reduce social desirability bias: Each respondents only evaluated one gender. Overall, the random distribution of the vignettes was gender-balanced, meaning roughly 50% of the vignettes evaluated male partners, and 50% evaluated female partners.

Figure 2 shows as an example vignette for which respondents were asked to rate the appropriateness of the division of the *total workload*. In this example, they were asked to indicate the appropriateness of the share of the *female* partner. More vignette examples can be found in the Anchor Codebook, Wave 10 (The German Family Panel (pairfam) 2019). Screenshots of the different between-splits in the original German version shown to the respondents can be found in the Appendix A1-A10.

The hypothetical couples were described with up to seven different dimensions that are all known from the literature to influence a couple's distribution of (house-) work (for some general reviews, see e.g., Davis and Greenstein 2009; Baxter et al. 2008): (1) the couple's marital status; (2) the presence and age of children in the household; (3) the distribution of child care between partners; (4) the share of housework done by both partners; (5) the male partner's paid working hours; (6) the female partner's pair working hours; and (7) the relative earning power of both partners. Each of the seven dimensions varied in at least two and up to five categories (levels). Table 1 shows all dimensions and the respective levels. Experience from extensive pre-tests was used to determine the appropriate dimensions and levels.

hours po Her con Both ar (e.g., la	A <u>married</u> couple has <u>an 8-year-old child</u> . She works <u>30 hours per week</u> , he works <u>20 hours per week</u> . Her contribution to their monthly household income is <u>approximately half</u> of his. Both are normally responsible for <u>50% (15 hours per week)</u> of the weekly housework (e.g., laundry, cooking, cleaning, repairs). She is responsible for a <u>smaller share</u> of the child care than is he.									
How appropriate do you think <u>her share of the total workload (incl. housework, paid employment, and child care if applicable)</u> [answer format 2: <u>her share of the housework]</u> is?										
Her sha	re of th	e total	workloa	d						
should is should be be much appro- much lar- smaller priate ger -5 -4 -3 -2 -1 0 1 2 3 4 5 -0 0 0 0 0 0 0 0 0 0										
No answer										

Source: The German Family Panel (pairfam) (2019). For examples of the original German versions, see Appendix A1-A10.

As already mentioned, a between-respondent variation of the amount of information given for each of the hypothetical vignette persons was implemented: (A) in the *low information condition*, only information on family status, child care, and housework share (i.e., dimensions 1-4) was given. (B) In the *medium information condition*, information on both partners' paid working hours was added (i.e., dimensions 5 and 6), (C) while in the *high information condition*, information on the relative earnings of both partners (i.e., dimension 7) was included. This variation of the amount of information was done to see whether differences in the evaluation of female versus male vignette persons become smaller once respondents are provided with more information (Düval and Auspurg 2019). From the viewpoint of theories on gender stereotypes and statistical discrimination, one can hypothesize that respondents assume traditional gender-based constellations (e.g., a male breadwinner, a higher earning power for male vs. female partners) when little information is available. One goal of this vignette study was to test whether traditional norms influence respondents' support of the

traditional distribution of housework, in which the female partner is responsible for a larger share of housework than her male partner.

				Dimensions	Levels
L			1	Marital status	Unmarried/married
conditic	ion		2	Presence and age of children	No children/2 years/8 years
ow-info	o condit	condition	3	Share of child care (man/woman) ^a	Larger share than partner/smaller share than partner same share as partner/no information
split for low-info condition	exp. split for medium-info condition	high-info c	4	Share of housework (man/woman) ^a	70% (21 hours per week)/60% (18 hours) 50% (15 hours)/40% (12 hours)/30% (9 hours)
	t for me	for	5	Hours of paid work per week (man)	40/30/20 hours/no information ^b
	exp. spli	ental split	6	Hours of paid work per week (woman)	40/30/20 hours/no information ^b
		experimental	7	Relative earnings (man/woman) ^a	Twice as much as woman/half as much as woman same as woman/no information ^b

Table 1. Vignette Implementation: Overview of Dimensions and Levels

Notes: ^a See information on the random gender splits: About half of the respondents were informed and asked about the relative share of work of the male/female vignette person. ^b This was varied in between-respondent splits only, see explanation on the three different information conditions in the main text.

In addition, the amount of information on child care varied across vignettes: This information was excluded for couple described as having no children. In 25% of the vignettes, this information was excluded due to the experimental plan in Table 1, to test stereotypical assumptions of respondents: Are evaluations in the no-information condition similar to evaluations of conditions in which the female partner is described as being responsible for the larger share of child care? If yes, this would suggest that respondents use gendered beliefs about traditional constellations when evaluating appropriate shares of (house-) work. (For most couples in Germany, the female partner is in fact responsible for the larger share of child care.)²

² To keep the number of between-respondent levels low, and also because the information on child care had to be varied based on the first dimension that varied across the vignettes presented to single respondents (does the couple have children at all), the no-information condition for the share of child care was implemented in a within-respondent variation, i.e., respondents could be shown both vignettes that included, and that did not include information on this dimension.

III. Experimental Design to Generate Vignettes

The full set of possible scenarios (*vignette universe*, i.e., all possible combinations of dimension levels; see Auspurg and Hinz 2015) is calculated as the Cartesian product of the number of levels of all individual dimensions. In the case of this experiment, the full set comprises $N = 2 \times 3 \times 4 \times 4 \times 5 \times 4 = 7,680$ different vignettes. Instead of implementing the full set, a fraction of 750 vignettes was selected using a *D*-efficient sampling technique that minimizes correlations between dimensions while maximizing the variance of each of the dimensions. Therefore, the sample reflects both orthogonality and level balance, ensuring that all levels of single dimensions occur with roughly equal frequency. This allows for a sample of maximum statistical efficiency: confounding of vignette dimensions is prevented, with a maximum statistical power to estimate the effect of all dimensions on respondents' evaluations (for more details, see Atzmüller and Steiner 2010; Auspurg and Hinz 2015).

The *D*-efficient sample was generated by means of an algorithm provided by Warren Kuhfeld (2010) for the statistical software SAS. This algorithm searches for a vignette fraction with the maximum *D*-efficiency, a combined measure for orthogonality and level balance. The specified target criterion was a *D*-efficient fraction of 750 vignettes that orthogonalizes the following parameter: All main effects of the vignette dimensions, all two-way and three-way interactions between dimensions were not aliased with each other (i.e., not confounded, and can hence be isolated in their effects on vignette evaluations).³

The same fraction of 750 vignettes was used in all 10 different between-respondents splits that resulted from varying the response task (2 levels: division of housework or the division of total workload), the amount of information provided in the vignettes (3 levels: low, medium, high), and the gender of the vignette person whose share of (house-) work should be evaluated (2 levels: male or female partner). Crossing all these between-respondents splits, but using the low-information condition only in the split on housework, resulted in the 10 different splits shown in Table 2.⁴

³ The *D*-efficiency was 88.5.

⁴ For the split on the total workload, the most accurate information on the hours of paid work were used, i.e. not the low-information condition. This was done because this split in particular was to be used for testing theories on equity and equality, and not theories on stereotypical beliefs.

Respondents were then randomly allocated to one of the different splits and allocated to a random subsample (*deck*) of 3 vignettes (out of the fraction of 750 vignettes) within each split. In this allocation procedure, splits on the total workshare were deliberately oversampled. Additionally, splits 9 and 10 (i.e., total workload and high-information condition for male and female vignette persons) were oversampled.⁵ Table 2, column 5 shows the factor by which these splits were oversampled compared to the splits on housework; column 6 provides the number of respondents expected for each of the different splits (min. 250 respondents per split).

Split ^a	Response Task	Information Condition	Gender of the Vignette Person	Oversampling Factor	Expected N Respondents
1		Low	Male	1	250
2		Low	Female	1	250
3	Housework	Madium	Male	1	250
4	Housework	Medium	Female	1	250
5		Lliab	Male	1	250
6		High	Female	1	250
7		Madium	Male	2	500
8	Total workload	Medium	Female	2	500
9	Total workload	High	Male	4	1,000
10		High	Female	4	1,000
					Σ = 4,500

Table 2. Overview of the Ten Between-Respondent Splits

Notes: a For each split, 250 vignette decks à 3 vignettes were prepared.

This design ensures that there was no correlation between vignette dimensions.⁶ At the same time, the selection of levels used in the vignettes and their combinations are

⁵ As many users will likely be particularly interested in analyzing the high information condition focusing on the overall workload containing many experimental vignette treatments, as well as the fact that this split may be particularly interesting for analyses on subgroups of respondents (e.g., respondents living in dual-earner partnerships versus other respondents), this approach was used to ensure sufficient numbers of evaluations for such subgroup analyses.

⁶ With the exception of a weak correlation between the dimensions "children" and "child care" due to the exclusion of the implausible combination of no children and information on child care. Also, weak correlations between the male partner's hours of paid work per week, the female partner's hours of paid work per week of, and their relative earnings were unavoidably driven by this design: When no information on the female partner's working hours is available, information on the male partner's working hours is also missing, and vice versa. Also, when no information on relative earnings is available, information on working hours is also missing (i.e., low information condition).

not correlated with the between-respondents splits, as well as no correlation between respondents' characteristics and experimental manipulations. In particular, this experimental set-up made ensured that there was no correlation between the vignette persons' gender and their described working hours or relative earnings. For a correlation table of the realized sample, see Appendix A11. All checks suggest that the randomization was sufficient: The experimental treatments are not correlated with each other or any of the respondents' characteristics tested (e.g., gender, family status; see also Section IV for more details on these and further data quality checks).

IV. Realized Sample, First Descriptive Results, and Data Quality

In total, 4,750 respondents participated in wave 10 of the pairfam study. Of these, 4,624 (97.3%) evaluated at least one of the three vignettes assigned, resulting in a total of 13,703 completed vignette evaluations and an item nonresponse rate of only 3.8% (547 of 14,250 possible vignette evaluations missing).

	Per	Split	Per Respo		
		Vignette		Vignette	
Split	Respondents	Evaluations	Respondents	Evaluations	
1	212	633			Response task: housework
2	192	562			onse
3	204	607	1,260	3,741) task
4	223	658	1,200	0,741	:: hou
5	219	654			lsew
6	210	627			
7	522	1,551			tot
8	500	1,481	3,364	9,962	Response task total workload
9	1,168	3,464	0,001	0,002	rkload
10	1,174	3,466			a sk
Σ	4,624	13,703	4,624	13,703	_

Table 3. Realized Number of Respondents and Vignette Evaluations per Experimental Split

Table 3 shows the realized numbers of respondents and vignette evaluations per experimental split. Additionally, numbers of respondents and vignette evaluations are presented separately of both response tasks (i.e., evaluations of housework only vs.

total workload). The realized number of cases for each between-respondent split can also be calculated based on the information provided in Tables 2 and 3 (e.g., for the realized vignette evaluations for the medium-info condition, the values for splits 3, 4, 7, and 8 must be added). Additionally, Table A12 in the appendix shows the frequency with which each dimension's level occurred in the realized sample. As expected, the realized sample was quite balanced in terms of level frequency.

First descriptive results suggest that the factorial survey experiment worked well. Table 4 gives an overview of descriptive statistics on the evaluations. Respondents' evaluations are distributed across the entire response scale⁷, with a total mean answer of 5.03 (standard deviation [sd]: 2.07). Both response tasks (i.e., *"housework"* and *"total workload"*) had similar evaluation means.

Response Task	N Evaluations	Min./Max.	Mean	SD	Median	25/75%- Percentile
Total	13,703	0/10	5.03	2.07	5	4/6
Housework	3,741	0/10	5.04	2.10	5	4/6
Total workload	9,962	0/10	5.03	2.06	5	4/6

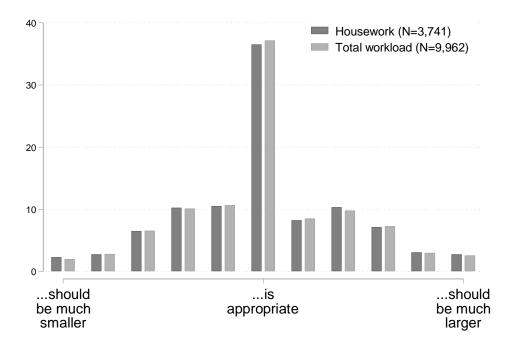
Table 4. First Descriptive Results of the Realized Vignette Evaluations

Notes: All descriptive statistics are at the vignette level. Please note that the eleven-point evaluation scale was re-coded in the pairfam dataset anchor10.dta, now ranging from 0 "His / Her share of the housework / total workload should be much smaller" to 10 "Her / His share of the housework / total workload should be much larger".

Figure 3 shows the distribution of the evaluations by response task (i.e., *housework* and *total workload*). In both splits, evaluations are distributed across the entire response scale, meaning that respondents used all possible vignette evaluations. Notably, for both splits the middle category ("*His / Her share of the housework / total workload is appropriate*") is the most frequently chosen response category (the modal value). One possible explanation for this response pattern would be satisficing, but further analysis (available upon request) revealed that the distribution of responses is very similar when "speeders" (i.e., respondents who required a relatively short time to

⁷ Please note that the eleven-point evaluation scale was re-coded in the *pairfam* dataset *anchor10.dta*, now ranging from 0 "*His / Her share of the housework / total workload should be much smaller*" to 10 "*Her / His share of the housework / total workload should be much larger*".

answer the vignettes) were excluded from the sample.⁸ Also, substantive analyses suggest that the middle category was mostly chosen to express a valid judgment: For example, there is a statistically significant association between choosing this category and respondents' opinion that it is up to the couple how the workload should be distributed (item viq4).





Concerning data quality, an experimental design was chosen in order to ensure that no correlations between vignette dimensions and/or experimental splits and respondents' characteristics occur (see Section 3). These and other correlations were tested to be sure of the efficacy of the randomization process. For most analyses using these vignette data (likely to focus on gender role theories and alternative theories to explain gendered work distributions within couples), it is particularly important that there exist no meaningful correlations between the vignette persons' gender and their working hours or relative earnings. In the realized sample, these Spearman correlations were very small with r_s =.009 (p=.276) and r_s =-.006 (p=.470), respectively.

⁸ Following standard procedures in factorial survey research, time values above the 99th percentile and under the first percentile were dropped in these analyses. In a second step, all values two standard deviations above or below the mean were excluded (for more information, see Mayerl and Urban 2008; Sauer et al. 2011).

V. Description of the Vignette Data Set

The vignette data set "anchor10_vig.dta" (Stata) or "anchor10_vig.sav" (SPSS) includes all vignette data in long format, meaning each line represents one vignette (see Table 5 for the data structure).

The first column of the vignette data set contains the id for the unique vignette packages (*decks*) presented to respondents (variable vig_index1). To merge the vignette data set with the anchor data set "anchor10.dta" (Stata) or "anchor10.sav" (SPSS), this variable is necessary. All respondents were presented three different vignettes (labeled as 1, 2, and 3), indicated by the variable vignr in the second column of the data. Each unique vignette also has an id number (variable id_vig; ranging from 1 to 750) allowing for the identification in the original sample of 750 vignettes.

vig_index1	vignr	id_vig	marriage	 chcare	sex	info	vig_ant
1	1	447	2	 2	1	2	1
1	2	734	2	 3	1	2	1
1	3	34	1	 4	1	2	1
2	1	361	2	 3	1	2	1
2	2	590	1	 1	1	2	1

 Table 5. Structure of the Vignette Data Set

Notes: This table exemplarily shows 5 rows of the vignette data set in long format. The first three rows show all three vignettes presented to one respondent, the last two rows the first two vignettes presented to another respondent. The variables marriage to chcare vary within the vignette package (deck) presented to single respondents, the last three variables (sex to vig_ant [which is the requested response task]) were varied between respondents only.

The following seven variables represent the vignette dimensions (marriage - chcare) that describe the hypothetical couple. In order to receive the dimension "hours of paid work per week" for men and women, the original variables concerning working hours (jobP1) and his/her partner's working hours (jobP2) must be recoded using the information on the vignette person's gender (sex). Also, the gender neutral variables on the vignette person's relative earnings (inc), share of housework (house), and share of child care (chcare) responsibility must be recoded when analyzing men's vs. women's share of (paid) work.

While the vignette dimensions vary within respondents, other variables only differ between respondents. The variable sex records the vignette person's gender (1=male;

2=female), while the variable info represents the information condition of the vignette (1=low, no information on labor market hours and relative earnings; 2=medium, only information on labor market hours; 3=high, information on labor market hours and relative earnings). Finally, the variable vig_ant informs on the response task (1=total workload evaluation; 2=housework evaluation only).

Note again that the vignette data are provided in long format in order to reduce the file size. To merge this file with the wave 10 anchor data set, the latter must first be transformed into long format from wide format. This reshaping procedure ensures that each vignette evaluation is displayed on its own data row (indicated by a newly generated variable vignr). After that, both data sets can be merged in the long-format using the key variables vig_index1 and vignr. For more detailed information on data management and the analysis of vignette data, see Auspurg and Hinz (2015).

VI. References

- Atzmüller, Christiane, and Peter Steiner. 2010. "Experimental Vignette Studies in Survey Research". Methodology 6:128-138.
- Auspurg, Katrin, and Thomas Hinz. 2015. Factorial Survey Experiments. Thousand Oaks, CA: Sage.
- Baxter, Janeen, Belinda Hewitt, and Michele Haynes. 2008. "Life Course Transitions and Housework: Marriage, Parenthood, and Time on Housework." Journal of Marriage and Family 70(2):259-72
- Brüderl, Josef, Sonja Drobnič, Karsten Hank, Bernhard Nauck, Franz J. Neyer, Sabine
 Walper, Philipp Alt, Christiane Bozoyan, Petra Buhr, Christine Finn, Madison Garrett,
 Henriette Greischel, Nicolai Gröpler, Kristin Hajek, Michel Herzig, Bernadette HuyerMay, Rüdiger Lenke, Lara Minkus, Bettina Müller, Timo Peter, Claudia Schmiedeberg,
 Philipp Schütze, Nina Schumann, Carolin Thönnissen, Martin Wetzel, and Barbara
 Wilhelm. 2019. The German Family Panel (pairfam). GESIS Data Archive, Cologne.
 ZA5678 Data file Version 10.0.0, doi: 10.4232/pairfam.5678.10.0.0.
- Davis, Shannon N., and Theodore N. Greenstein. 2009. "Gender Ideology: Components, Predictors, and Consequences." Annual Review of Sociology 35(1):87-105.
- Düval, Sabine, and Katrin Auspurg. 2019. "Should Women do more Housework? Experimental Insights on Gender Norms, Stereotypes and Norms of Equality" Presentation at 6th pairfam International User Conference. Cologne, Germany.
- Huinink, Johannes, Josef Brüderl, Bernhard Nauck, Sabine Walper, Laura Castiglioni, and Michael Feldhaus. 2011. "Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design." Zeitschrift für Familienforschung - Journal of Family Research 23:77-101.

- Kuhlfeld, Warren. 2010. Marketing Research Methods in SAS. Experimental Design, Choice, Conjoint and Graphical Techniques. Cary: SAS Institute.
- Mayerl, Jochen, and Dieter Urban. 2008. Antwortreaktionszeiten in Survey-Analysen. Messung, Auswertung und Anwendungen. Wiesbaden, Germany: VS Verlag für Sozialwissenschaften.
- Mutz, Diana C. 2011. Population-Based Survey Experiments. Princeton: Princeton University Press.
- Sauer, Carsten, Katrin Auspurg, Thomas Hinz, and Stefan Liebig. 2011. "The Application of Factorial Surveys in General Population Surveys: The Effects of Respondent Age and Education on Response Times and Response Consistency." Survey Research Methods 5(2):89-102.
- The German Family Panel (pairfam). 2019. Anchor Codebook. Wave 10. 2017/18. Release 10.0
- Wallander, Lisa. 2009. "25 Years of Factorial Surveys in Sociology: A Review." Social Science Research 38(3):505-20.

VII. Appendix

A0. Screenshot of the Original German Introductory Text

Text 39

Bei den folgenden Fragen interessiert uns, welche Arbeitsteilung für Partnerschaften als angemessen empfunden wird. Dazu werden Ihnen <u>3 beispielhafte Paare</u> vorgestellt.

Bei allen Paaren sind Mann und Frau etwa 35 Jahre alt und haben einen vergleichbaren Bildungsabschluss. Einige Paare haben möglicherweise Kinder; diese werden während der Arbeitszeiten der Eltern von anderen Personen (Tagesstätte, Schule) betreut.

Bitte geben Sie jeweils an, wie angemessen Sie die Aufteilung der Berufstätigkeit und Hausarbeit (und ggf. Kinderbetreuung) der Paare finden.

Es gibt dabei keine richtigen oder falschen Antworten. Uns interessiert nur Ihre persönliche Meinung.

Ich werde Ihnen nun den Computer übergeben, damit Sie die nächsten vier Fragen selbst beantworten können.

Notes: Here, the response task is "total workload". The introductory text for the response task "housework" differs from this example. Instead of "the distribution of housework and paid employment (and child care if applicable)" it states: "the distribution of housework". The rest of the text remains the same.

A1. Screenshot of a Vignette used in Split 1 (Housework, Low Information Condition, Male Vignette Person)

vig3											
Von der Ha	Ein <u>verheiratetes</u> Paar hat <u>ein achtjähriges Kind</u> . Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt er gewöhnlich <u>40% (12 Stunden in der Woche)</u> , während sie die restlichen <u>60% (18 Stunden in der Woche)</u> erledigt.										
Wie angen	Wie angemessen finden Sie <u>den Hausarbeitsanteil des Mannes?</u>										
Der Hausar	Der Hausarbeitsanteil des Mannes										
sollte deutlich geringer sein 5	deutlichgenaudeutlichgeringerange-höherseinmessenseinKeine										
0	0	0	0	0	0	0	0	0	0	0	Ō

A2. Screenshot of a Vignette used in Split 2 (Housework, Low Information Condition, Female Vignette Person)

vig3												
Ein <u>verheiratetes</u> Paar hat <u>ein zweijähriges Kind</u> . Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt sie gewöhnlich <u>60% (18 Stunden in der Woche)</u> , während er die restlichen <u>40% (12 Stunden in der Woche)</u> erledigt.												
Wie angei	Wie angemessen finden Sie <u>den Hausarbeitsanteil der Frau?</u>											
Der Hausa	Der Hausarbeitsanteil der Frau											
sollte deutlich geringer sein -5	-4	-3	-2	-1	ist genau ange- messen 0	1	2	3	4	sollte deutlich höher sein 5	Keine Angabe	
Ŏ	Ó	Ŏ	Ō	Ö	Ŏ	Ö	Ō	Ŏ	Ö	Ŏ	O	

A3. Screenshot of a Vignette used in Split 3 (Housework, Medium Information Condition, Male Vignette Person)

vig	1												
Vo	Ein <u>verheiratetes</u> Paar hat <u>ein achtjähriges Kind</u> . Er arbeitet <u>30 Stunden in der Woche</u> , sie <u>40 Stunden in der Woche</u> . Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt er gewöhnlich <u>40% (12 Stunden in der Woche)</u> , während sie die restlichen <u>60% (18 Stunden in der Woche</u>) erledigt. Bei der Kinderbetreuung übernehmen beide einen <u>gleich großen Anteil</u> .												
Wi	e anger	nessen fin	den Sie <u>de</u>	en Hausar	beitsantei	l des Manı	nes?						
De	er Hausar	beitsanteil	des Manne	<u>S</u>									
	sollte deutlich geringer sein -5	-4	-3	-2	-1	ist genau ange- messen 0	1	2	3	4	sollte deutlich höher sein 5		Keine Angabe
	0	0	0	0	0	0	0	0	0	0	0		Ō

A4. Screenshot of a Vignette used in Split 4 (Housework, Medium Information Condition, Female Vignette Person)

vig1												
Ein <u>unverheiratetes</u> Paar hat <u>ein achtjähriges Kind</u> . Sie arbeitet <u>20 Stunden in der Woche</u> , er <u>30 Stunden in der Woche</u> . Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt sie gewöhnlich <u>70% (21 Stunden in der Woche)</u> , während er die restlichen <u>30% (9 Stunden in der Woche)</u> erledigt. Bei der Kinderbetreuung übernimmt sie einen <u>größeren Anteil</u> als er.												
Wie angemessen finden Sie <u>den Hausarbeitsanteil der Frau?</u>												
Der Hausar	Der Hausarbeitsanteil der Frau											
sollte deutlich geringer sein -5	-4	-3	-2	-1	ist genau ange- messen 0	1	2	3	4	sollte deutlich höher sein 5	Keine Angabe	
0	0	0	0	0	0	0	0	0	0	0	Ŏ	

A5. Screenshot of a Vignette used in Split 5 (Housework, High Information Condition, Male Vignette Person)

vig1											
Sein monatlicher E Von der Hausarbe	Ein <u>verheiratetes</u> Paar hat <u>ein zweijähriges Kind</u> . Er arbeitet <u>20 Stunden in der Woche</u> , sie <u>40 Stunden in der Woche</u> . Sein monatlicher Beitrag zum Haushaltseinkommen ist <u>etwa halb so hoch</u> wie ihr Beitrag. Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt er gewöhnlich <u>40% (12 Stunden in der Woche)</u> , während sie die restlichen <u>60% (18 Stunden in der Woche)</u> erledigt. Bei der Kinderbetreuung übernimmt er einen <u>kleineren Anteil</u> als sie.										
Wie angemessen	Wie angemessen finden Sie <u>den Hausarbeitsanteil des Mannes?</u>										
Der Hausarbeitsar	Der Hausarbeitsanteil des Mannes										
sollte deutlich geringer sein -5 -4	-3	-2	-1	ist genau ange- messen 0	1	2	3	4	sollte deutlich höher sein 5	Keine Angabe	
0 0	0	0	0	0	0	0	0	0	0	Ŏ	

A6. Screenshot of a Vignette used in Split 6 (Housework, High Information Condition, Female Vignette Person)

vig1 Ein <u>unverheiratetes</u> Paar hat <u>ein achtjähriges Kind</u> . Sie arbeitet <u>40 Stunden in der Woche</u> , er <u>20 Stunden in der Woche</u> . Ihr monatlicher Beitrag zum Haushaltseinkommen ist <u>etwa genau so hoch</u> wie sein Beitrag. Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt sie gewöhnlich <u>30% (9 Stunden in der Woche)</u> , während er die restlichen <u>70% (21 Stunden in der Woche)</u> erledigt. Bei der Kinderbetreuung übernimmt sie einen <u>größeren Anteil</u> als er.											
Wie angeme		_		peitsante	il der Frau?	2			_		
sollte deutlich geringer sein -5 O	-4 0	-3 O	-2 O	-1 O	ist genau ange- messen 0 O	1 0	2	3 O	4 0	sollte deutlich höher sein 5 O	Keine Angabe O

A7. Screenshot of a Vignette used in Split 7 (Total Workload, Medium Information Condition, Male Vignette Person)

Ein <u>verheiratetes</u> Paar hat <u>ein zweijähriges Kind</u> . Beide arbeiten jeweils 40 Stunden in der Woche.											
Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt er gewöhnlich <u>70% (21 Stunden in der Woche)</u> , während sie die restlichen 30% (9 Stunden in der Woche) erledigt. Bei der Kinderbetreuung übernimmt er einen kleineren Anteil als sie.											
Wie angemessen finden Sie <u>den gesamten Arbeitsanteil des Mannes (also Berufstätigkeit, Hausarbeit und ggf.</u> Kinderbetreuung zusammen)?											
Der gesamte Arbeitsanteil des Mannes											
					ist					sollte	
sollte										1	
deutlich					genau					deutlich	
deutlich geringer					ange-					höher	Keine
deutlich	-4	-3	-2	-1		1	2	3	4		Keine Angabe

A8. Screenshot of a Vignette used in Split 8 (Total Workload, Medium Information Condition, Female Vignette Person)

vig1											
Ein <u>unverheir</u> Von der Hau restlichen <u>70</u>	sarbeit (z.	B. Wasche	en, Kochen,	Putzen, Re	eparaturen)	erledigt s	ie gewöhnli	ch <u>30% (9</u>	Stunden in	der Woche	<u>),</u> während er die <u>eil</u> .
Wie angeme zusammen)	?			en Arbeits	anteil der	Frau (also	o Berufstäl	tigkeit, Ha	usarbeit u	ınd ggf. Kir	nderbetreuung
sollte deutlich geringer sein -5	-4	-3	-2	-1	ist genau ange- messen 0	1	2	3	4	sollte deutlich höher sein 5	Keine Angabe
	0	0	0	0	0	0	0	0	0	0	0

A9. Screenshot of a Vignette used in Split 9 (Total Workload, High Information Condition, Male Vignette Person)

restlichen <u>40% (12 Stunden in der Woche)</u> erledigt. Bei der Kinderbetreuung übernehmen beide einen <u>gleich großen Anteil</u> . Wie angemessen finden Sie <u>den gesamten Arbeitsanteil des Mannes (also Berufstätigkeit, Hausarbeit und ggf.</u> <u>Kinderbetreuung zusammen)?</u>	rond cio dia									
Wie angemessen finden Sie <u>den gesamten Arbeitsanteil des Mannes (also Berufstätigkeit, Hausarbeit und ggf.</u> <u>Kinderbetreuung zusammen)?</u>	Von der Hausarbeit (z.B. Waschen, Kochen, Putzen, Reparaturen) erledigt er gewöhnlich 60% (18 Stunden in der Woche), während sie die									
Kinderbetreuung zusammen)?	restlichen <u>40% (12 Stunden in der Woche)</u> erledigt. Bei der Kinderbetreuung übernehmen beide einen <u>aleich großen Anteil</u> .									
	Wie angemessen finden Sie <u>den gesamten Arbeitsanteil des Mannes (also Berufstätigkeit, Hausarbeit und ggf.</u>									
	Kinderbetreuung zusammen)?									
Der gesamte Arbeitsanteil des Mannes	Der gegente Arbeitsenteil des Mannes									
Der gesamte Arbeitsamen des mannes										
sollte ist sollte										
deutlich genau deutlich										
geringer ange- höher										
gennger ange- hoher sein messen sein -5 -4 -3 -2 -1 0 1 2 3 4 5	Keine Angabe									

A10. Screenshot of a Vignette used in Split 10 (Total Workload, High Information Condition, Female Vignette Person)

V	vig1											
 \	hr monatlic /on der Ha	her Beitrag usarbeit (z	zum Haus .B. Wasche	haltseinkor en, Kochen,	nmen ist <u>et</u>	<u>wa halb so</u> eparaturen)	hoch wie s	der Woche, sein Beitrag beide gew) .			<u>in der Woche)</u> . Bei
	Vie angen Lusammer		den Sie <u>d</u>	en gesamt	en Arbeits	anteil der	Frau (also	o Berufstä	tigkeit, Ha	usarbeit u	nd ggf. Ki	nderbetreuung
	Der gesam	te Arbeitsa	nteil der Fr	<u>au</u>								
	sollte deutlich					ist genau					sollte deutlich	
	geringer sein					ange- messen					höher sein	Keine
	-5	-4	-3 O	-2 O	-1 O	0	1	2 0	3 O	4	5	Angabe O
					-			-	-	-		

A11. Check of the Experimental Design: Spearman Correlations

	Marital status	Presence/ age of children	Hours of paid work per week (man)	Hours of paid work per week (woman)	Relative earnings (man)	Share of housework (man)	Share of child care (man)	Gender of vignette person
Marital status	1.0000	-	-	-	-	-	-	-
Presence/age of children	-0.0058 (.4990)	1.0000	-	-	-	-	-	-
Hours of paid work per week (man)	0.0052 (.5425)	0.0015 (.8640)	1.0000	-	-	-	-	-
Hours of paid work per week (woman)	0.0053 (.5329)	0.0052 (.5453)	0.2488*** (.0000)	1.0000	-	-	-	-
Relative earnings (man)	0.0025 (.7657)	-0.0006 (.9398)	0.1650*** (.0000)	0.1763*** (.0000)	1.0000	-	-	-
Share of housework (man)	0.0046 (.5885)	-0.0064 (.4548)	0.0055 (.5208)	0.0017 (.8446)	0.0085 (.3186)	1.0000	-	-
Share of child care (man)	-0.0074 (.3890)	- 0.5675*** (.0000)	-0.0118 (.1671)	-0.0080 (.3476)	0.0014 (.8716)	-0.0049 (.5700)	1.0000	-
Gender of vignette person	-0.0055 (.5226)	0.0033 (.6957)	0.0009 (.9181)	-0.0079 (.3562)	-0.0088 (.3056)	0.0088 (.3048)	-0.0068 (.4249)	1.0000

Notes: The Spearman correlation r_s measures linear dependence between two variables. Numbers close to 0 indicate independence between two variables (vignette dimensions). Therefore, small numbers speak for the quality of the realized vignette fraction (high orthogonality between dimensions). As the share of child care is dependent on the variable age of children, a correlation between those two variables is expected. Also, the small correlations between the hours of paid work per week for male and female partner, as well as the relative earnings are expected and can be explained by design: When there is "no information" on the female partner's working hours, information on the male partner's working hours is also missing, and vice versa. Also, when no information on the relative earnings is available, information on the working hours is missing (i.e. low information condition). *p*-values in parentheses. *** *p*<0.01, ** *p*<0.05, * *p*<0.1

Dimension	Level	Realized Evaluations	Share (%)
Marital status	unmarried	6,842	49.9
	married	6,861	50.1
Presence and age of children	no children	4,612	33.7
	2 years	4,598	33.6
	8 years	4,493	32.8
Hours of paid work per week (man)	40 hours	4,270	31.2
	30 hours	4,184	30.5
	20 hours	4,054	29.6
	no information	1,195	8.7
Hours of paid work per week (woman)	40 hours	4,120	30.1
	30 hours	4,166	30.4
	20 hours	4,222	30.8
	no information	1,195	8.7
Relative earnings (man)	twice as much as woman	2,717	19.8
	half as much as woman	2,729	19.9
	same as woman	2,765	20.2
	no information	5,492	40.1
Share of housework (man)	70% (21 hours per week)	2,767	20.2
	60% (18 hours per week)	2,697	19.7
	50% (15 hours per week)	2,760	20.1
	40% (12 hours per week)	2,667	19.5
	30% (9 hours per week)	2,812	20.5
Share of child care (man)	larger share than woman	2,323	17.0
	smaller share than woman	2,266	16.5
	same share as woman	2,240	16.4
Or a dam of a immethe	no information	6,874	50.2
Gender of vignette person		0.000	
	male vignette person	6,909	50.4
	female vignette person	6,794	49.6

A12. Experimental Design Check: Frequency of Dimension Levels in the Realized Sample